Serial No. 09/747,350                    - 5 -                      Art Unit: 2153

## REMARKS

This paper is responsive to the Final Office Action dated March 11, 2005. All rejections and objections of the Examiner are respectfully traversed. Reconsideration and further examination is respectfully requested.

In the Office Action, the Examiner has again rejected claims 1-11 for obviousness under 35 U.S.C. 103, citing United State patent number 6,643,706 of Marques et al. ("Marques et al."), as well as the Background of the Applicants' present disclosure. Applicants respectfully traverse these rejections.

In the Response to Arguments of the Office Action, the Examiner states that Marques et al. uses indexes to allow routing protocols to identify new or modified routes, as shown in Figs. 9, 10 and 11 of Marques et al. Applicants note that with regard to the structure shown in Fig. 8 and Fig. 9, Marques et al. expressly teach that "routing protocol pointers such as those shown in Fig. 3 are used". See Column 12, lines 56-61. Fig. 3 of Marques et al. illustrates Routing Protocol Pointer 350 and Routing Protocol Pointer 360 indicating Route Entry 310(2) and Route Entry 310(N) in a "linked list of route entries (exemplified by linked list 300) that maintains a list of routes *that are currently active*" (emphasis added). Moreover, at lines 9-11 of column 13, Marques et al. teach that the structure 900 of Fig. 9 is "i.e., routing table 240". Thus Marques et al. teach a system in which indices are maintained by routing protocols and referring to positions *in a routing table*. This is true also with regard to the radix tree 800 of Fig. 8 in Marques et al., which is described as being "used to implement routing table 240" at lines 13 and 14 of column 12 in Marques et al. In contrast, the bookmarks of the present independent claims 1 and 11 are *in a route change queue*, that is *separate from the routing table*. Accordingly, Applicants respectfully submit that the indexes of Marques et al. with regard to a routing table are far

different from the bookmarks of the present independent claims 1 and 11, which are in a route change queue that is separate from the routing table.

Further in the Response to Arguments, the Examiner states that "routing table module 230 is separate from routing table 240 in fig. 2" of Marques et al. Thus the Examiner is indicating that the routing table module 230 of Marques et al. is the same as the change queue of the present independent claims 1 and 11. However, Applicants respectfully disagree with such a conclusion, and instead strongly urge that the routing table module 230 of Marques et al. in no way discloses or suggests the separate change queue as in the present independent claims 1 and 11. Applicants respectfully draw the Examiner's attention to column 2, lines 37-41 in which Marques et al. describe the routing table module as a "software module that is charged with maintaining the routing table". Similarly, that routing table 230 is a software module that maintains the routing table is further emphasized at lines 3-7 of column 6 in Marques et al., which state as follows: "When one or more of routing protocols 220(1)-(N) requests that a *routing module 230 make changes to the routes stored in routing table 240,* others of routing protocols 220(1)-(N) are notified of the change, and can process the change at their own pace" (emphasis added). Thus it is clear that the routing table 230 of Marques et al. teaches a software module that maintains a routing table, and does not teach or suggest a change queue that is separate from the routing table, or assigning a bookmark in such a change queue, as in the present independent claims 1 and 11.

With regard to the Examiner's statement in the Response to Arguments that "One means of effecting such a separation is through the use of buffers to hold the notifications (col. 2, lines 33-42 and col. 3, lines 1-3)", Applicants respectfully disagree that the cited sections, and/or any other part of Marques et al. do not teach or suggest the change queue that is separate from the

routing table as in the present independent claims 1 and 11.    First, the "separation" being

discussed in col. 2 through line 24 of col. 3 in Marques et al. is a separation of actions between

different processes, not between a routing table and a change queue as in the present independent

claims 1 and 11.    This is illustrated by the following text beginning at line 66 of Marques et al.:

"One way to address the problems caused by this coupling is to *separate the actions* of updating

routing table 140 and notifying routing protocols of the change" (emphasis added).

Additionally, the notification buffers described by Marques et al. make up a "perfect history . . .

kept *for each of the routing protocols* receiving notifications of route changes in route table 140.

Because *each routing protocol keeps a copy of the change history* of routing table 140, large

amounts of memory are consumed by the buffering of such changes" (emphasis added).   This is

in clear contrast to the present change queue of claims 1 and 11, which is *shared across a*

*plurality of multicast protocols*.    Moreover, the discussion of using buffers for notifications in

columns 2 and 3 of Marques et al. is directed towards *discouraging their use* because "large

amounts of memory are consumed by the buffering of such changes" (col. 3 lines 13-16).    Thus

Marques et al. fails to foresee even the desirability of having a system that includes a change

queue shared across a plurality of multicast protocols, as in the present independent claims 1 and

11, and in fact teaches away from notification buffers of any kind.

Applicants further respectfully urge that the Examiner has not established a sufficient

motivation to combine the cited references.  A *prima facie* case of obviousness under 35 U.S.C.

103 must include a showing of a suggestion, teaching or motivation that would have led a person

of ordinary skill in the art to combine the cited references in the particular manner claimed.   See

In re Dembiczak, 175 F.3d 994, 998 (Fed. Cir. 1999), and In re Kotzab, 217 F.3d 1365, 1371

(Fed. Cir. 2000).   "[C]ombining prior art references without evidence of such a suggestion,

Serial No. 09/747,350 - 8 - Art Unit: 2153

teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight." Dembiczak, 175 F.3d at 999. In the present application, Applicants respectfully urge that the Examiner has not provided any motivation to modify the teachings of Marques et al. with regard to multicast protocols except the Applicants' own disclosure. This is impermissible, since the teaching or suggestion to make the claimed combination, and the reasonable expectation of success must both be found in the prior art, *not in applicant's disclosure*. In re Vaeck, 947 F.2d 488 (Fed. Cir. 1991).

For the above reasons, Applicants respectfully urge that the combination of Marques et al. and the Background of the Invention of Applicants' disclosure does not disclose or suggest all the features of the present independent claims 1 or 7. Accordingly, the combination of Marques et al. and the Background of the Invention do not support a *prima facie* case of obviousness under 35 U.S.C. 103 with regard to independent claims 1 and 7. As to the remaining dependent claims, they each depend from independent claims 1 and 7, and are respectfully believed to be patentable over the combination of Marques et al. and the Background of the Invention for at least the same reasons. Applicants also respectfully urge that the Examiner has not set forth sufficient reasons to combine the cited references, as also discussed above. Reconsideration of all pending claims is respectfully requested.

For these reasons, and in view of the above amendments, Applicants respectfully request that the rejections of the Examiner be withdrawn. This application is now considered to be in condition for allowance and such action is earnestly solicited.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully

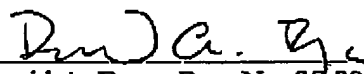Serial No. 09/747,350                    - 9 -                    Art Unit: 2153

requested that the Examiner telephone David A. Dagg, Applicants' Attorney at 617-630-1131 so

that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now

considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

SEPTEMBER 6, 2005
Date

David A. Dagg, Reg. No. 37,800
Attorney/Agent for Applicant(s)
Steubing McGuinness & Manaras LLP
125 Nagog Park Drive
Acton, MA 01720
(978) 264-6664

Docket No. 2204/A44 120-199